Psittacine beak and feather disease (PBFD) is caused by a circovirus belonging to the family Circoviridae. It is a small DNA virus very resistant to disinfectants and persistent in the environment. The virus causes disease in New and Old World parrots. The PBFD virus is extremely infectious and is spread horizontally via ingestion or inhalation of infected faeces, feather dust, crop secretion or fomites and vertically from hen to egg embryo.

Adult birds normally develop the “beak & feather” form: abnormal feather and beak growth with progressive immunosuppression. Young parrots tend to develop the acute/peracute form with severe immunosuppression, anaemia and death.

Nad Al Shiba Veterinary Hospital has seen an increasing incidence of this disease since opening in 2004. PBFD has been identified in several parrot species but predominantly young African grey parrots (Psittacus e. erithacus). This typical patient presents at 3 to 10 months old having been purchased in a pet shop and is usually symptomatic (see above). Haematology shows severe leucopenia (low white blood cell count) and secondary infections signs/symptoms may be present.

While severe leucopenia is highly suggestive of PBFD, haematology alone is not diagnostic. A normal haemogram in an asymptomatic young African grey parrot does not rule out PBFD as the bird may be incubating the virus. The diagnosis is confirmed by PCR testing from blood or more reliably, bone marrow. Histopathology on post mortem tissue from the Bursa of Fabricius is also diagnostic.

There is currently no proven treatment for this fatal disease. Nad Al Shiba Veterinary Hospital is trialing avian interferon, a drug showing some promise in treating PBFD positive young African greys, however a firm protocol has yet to be established. Birds accepted for the trial will receive the following diagnostics and therapy:

- A bone marrow aspirate and PCR test to confirm PBFD status before and after trial.
- A course of one week of antibiotic and antifungal to prevent opportunistic infections.
- Multiple haematology tests run during trial to assess the response of the bird to the treatment.
- Daily interferon antiviral therapy.

The hospitalisation period will last for 3 months during which the parrot will receive a daily dose of gamma (or omega) avian interferon and an appropriate diet and management according to the species.

For veterinarians wishing to refer birds for trial therapy please contact Giulio Russo at above address or Nad Al Shiba Veterinary Hospital at info@nadvethosp.com